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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,777	06/25/2003	Scott A. Moskowitz	80391.0003	2233
SCOTT A MO	7590 05/31/2007 SKOWITZ		EXAM	INER
16711 COLLINS AVENUE			LASHLEY, LAUREL L	
#2505 MIAMI, FL 33	160		ART UNIT	PAPER NUMBER
			2132	
			MAIL DATE	DELIVERY MODE
			05/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/602,777	MOSKOWITZ, SCOTT A.				
Office Action Summary	Examiner	Art Unit				
	Laurel Lashley	2132				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tiruly will apply and will expire SIX (6) MONTHS from the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 06 Fe	<u>ebruary 2007</u> .					
· <u>=</u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 6-21,30 and 31 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 6-21,30-31 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine	ır.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate				

Application/Control Number: 10/602,777 Page 2

Art Unit: 2132

#### **DETAILED ACTION**

#### Response to Amendment

1. Applicant's amendments with regard to claims 14, 19, and 30 and the cancellation of claims 22 – 24 filed 02/06/2007 have been accepted and entered. Therefore claims 6 – 21 and 30 – 31 are pending and have been examined.

### Information Disclosure Statement

2. The information disclosure statement filed 02/06/2007 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

## Response to Arguments

3. Applicant's arguments, see pages 11 – 12 with regard to Borgelt neither disclosing a digital signal, predetermined key, file format and mask set limitations, filed 02/06/2007, with respect to the rejection(s) of claim(s) 6 – 21 under 102(e) as anticipated by Borgelt et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 103(a) relying on newly found prior art of Allen, Auerbach et al. and Blakley et al.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6 – 7, 9 – 12, and 30 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in US Patent No. 6041316 (hereinafter US '1316) further in view of Auerbach et al. in US Patent No. 5673316 (hereinafter US '3316).

For claim 6, US '1316 discloses:

A method for protecting a digital signal, comprising the steps of:

providing a digital signal (see column 3, line 45: as performed by the digital data processor) {comprising digital data and file format information};

creating a predetermined key that manipulates (see column 6, lines 61 – 62: encryption key) {the file format information}; and

manipulating {the file format information} using the predetermined key (see column 2, lines 44 – 48: encrypt portion of data to result in partially-degraded version of data; column 6, lines 60 – 64: encryption key used prior to decryption key; column 7, lines 47 – 55: methods of manipulating portions)

but does not explicitly disclose the digital signal comprising digital data and file format information.

US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted).

Allen and Auerbach et al. are analogous art because they are from the same problem solving areas (partially controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data

(content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art.

For claim 7, US '1316 discloses:

The method of claim 6, wherein the digital signal represents a continuous analog waveform. (see column 4, lines 4 – 5)

For claim 9, US '1316 teaches:

The method of claim 6, wherein the digital signal is a message to be authenticated. (see column 5, lines 27 – 31: message quality associated with payment; column 6, lines 55 – 59: authentication of encryption and decryption key pair)

For claim 10 and similar claim 31, US '1316 teaches:

The method of claim 6, wherein the predetermined key comprises a key pair comprising a public key and a private key. (see column 2, lines 45 – 51: encryption and decryption key pair)

For claim 11, US '1316 disclose the method of claim 6 but does not expressly disclose using a digital watermarking technique to encode information that identifies ownership, use, or other information about the digital signal, into the digital signal.

Auerbach et al. in US '3316 however does disclose using a digital watermarking technique to encode information that identifies ownership, use, or other information about the digital signal, into the digital signal. (see column 4, lines 22 – 24: fingerprinting and watermarking of document parts...)

Allen and Auerbach et al. are analogous art because they are from the same problem solving areas (partially controlling access to digital/copyrighted data). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the method of controlling access to digital data as in Allen such that it would incorporate a digital

watermarking technique as in Auerbach et al. The motivation for doing so would have been to improve the security and authenticity of digital data.

For claim 12, US '1316 teaches:

The method of claim 6, wherein the digital signal represents a still image, audio or video. (see column 4, lines 4 – 5)

For claim 30, US '1316 discloses:

A method for protecting digital data, where the digital data is organized into a plurality of frames, each frame having i) a header comprising (file format information) and ii) at least a portion of {the digital data}, said method comprising the steps of (see column 3, lines 45: as performed by the digital data processor; column 5, lines 1 -2: data portions equivalent to Applicant's frames)

creating a predetermined key to manipulate {the file format information} in one or more of the plurality of frames (see column 6, lines 61 - 62: encryption key ); and

manipulating (the file format information) using the predetermined key in at least two of the plurality of frames, such that the digital data will be perceived by a human as noticeably altered if it is played without using a decode key to restore the file format information to a prior state (see column 2, lines 44 – 48: encrypt portion to result in partially degraded version of data—decryption key not required for degraded state; column 4, lines 25 – 37; partially degraded version substantially recognizable though manipulated...; column 7, lines 47 – 55: methods of manipulating portions; column 6, lines 60 – 64: encryption key used to manipulated portions, decryption key used afterwards) but does not explicitly disclose the digital signal comprising digital data and file format information.

US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type

(equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted).

Allen and Auerbach et al. are analogous art because they are from the same problem solving areas (partially controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art.

5. Claims 8 and 13 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in US Patent No. 6041316 (hereinafter US '1316) and Auerbach et al. in US Patent No. 5673316 (hereinafter US '3316) further in view of Blakley, III et al. in US Patent No. 5677952 (hereinafter US '952) .

For claim 8, US '1316 teaches the method of claim 6, and a predetermined key but does not expressly disclose a predetermined key comprising a plurality of mask sets. (see column 3, lines 58 – 63)

Blakley, III et al. in US '952 however does disclose a predetermined key comprising mask sets (see column 5, lines 46 - 50: mask associated with a secret key).

It would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a secret key comprising mask sets as in Blakley et al. The motivation for doing so would have been to improve the security and authenticity of the digital data.

For claim 13, US '1316 teaches the method of claim 6 and manipulating parts of digital data using an encryption key but does not expressly disclose, wherein the predetermined key comprises one or more mask sets having random or pseudo-random series of bits, the method further comprising the steps of:

validating the one or more mask sets before manipulating the file format information using the predetermined key.

Blakley, III et al. in US '952 however does disclose the predetermined key comprises one or more mask sets having random or pseudo-random series of bits, the method further comprising the steps of: *and* preceding validating the one or more mask sets (see column 2, lines 10-11 and 16 – 17: pseudorandom bit string used to encrypt/decrypt data access associated with key; column 5, lines 46 – 50: mask associated with a secret key) *but does not explicitly disclose* a file format information.

US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted).

Allen, Auerbach et al. and Blakley, III et al are analogous art because they are from the same problem solving areas (controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art. Furthermore, it would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a secret key comprising mask sets as in Blakley et al. The motivation for doing so would have been to improve the security and authenticity of the digital data.

For claim 14, US '1316 teaches the method of claim 6 teaches the method of claim 6 and manipulating parts of digital data using an encryption key *but does not expressly disclose*,

wherein the predetermined key comprises one or more mask sets having random or pseudorandom series of bits, the method further comprising the steps of:

validating the one or more mask sets after manipulating the file format information using the predetermined key. (see column 3, lines 58 – 63)

Blakley, III et al. in US '952 however does disclose the predetermined key comprises one or more mask sets having random or pseudo-random series of bits, the method further comprising the steps of: and subsequently validating the one or more mask sets (see column 2, lines 10-11 and 16 – 17: pseudorandom bit string used to encrypt/decrypt data access associated with key; column 5, lines 46 - 50, 66 - column 6, lines 1 - 3: mask associated with a secret key and hash associated with key, key associated with bits) but does not explicitly disclose a file format information.

US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted).

Allen, Auerbach et al. and Blakley, III et al are analogous art because they are from the same problem solving areas (controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art. Furthermore, it would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a secret key comprising mask sets as in Blakley et al.

The motivation for doing so would have been to improve the security and authenticity of the digital data.

For claim 15, US '1316 teaches the method of claim 6 *but does not expressly disclose*, wherein the predetermined key comprises one or more mask sets having random or pseudorandom series of bits, the method further comprising the steps of:

generating a hash value using the one or more masks sets; and

authenticating the one or more mask sets by comparing the generated hash value with a hash value.

Blakley, III et al. however does disclose wherein the predetermined key comprises one or more mask sets having random or pseudo-random series of bits, the method further comprising the steps of:

generating a hash value using the one or more masks sets; and authenticating the one or more mask sets by comparing the generated hash value with a hash value (see column 5, lines 66 – column 6, lines 1 – 3; 21 – 23: cross checking).

It would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a secret key comprising mask sets used to generate and authenticate a hash value as in Blakley, III et al. The motivation for doing so would have been to improve the authenticity and integrity of the digital data.

For claim 16, US '1316 teaches the method of claim 13, but does not expressly disclose wherein said step of validating comprises the steps of:

generating a digital signature using the one or more mask sets; and comparing the digital signature with a predetermined digital signature.

Auerbach et al. in US '3316 however discloses generating a digital signature (using the one or more mask sets); and

comparing the digital signature with a predetermined digital signature (see column 5, lines 27 – 32; 35 – 40: authenticity of digital signature and parts) but does not expressly disclose using one or more mask sets.

Blakley, III et al. in US '952 however does disclose using one or more mask sets (see column 5, lines 46 - 50: mask associated with a secret key).

Allen, Auerbach et al. and Blakley, III et al are analogous art because they are from the same problem solving areas (controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art. Furthermore, it would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a digital signature comprising mask sets as in Blakley et al. The motivation for doing so would have been to improve the security of digital data by ensuring its authenticity and integrity.

For claim 17, US '1316 teaches the method of claim 6 but does not expressly disclose. wherein the predetermined key comprises one or more mask sets having random or pseudorandom series of bits, the method further comprising the steps of:

authenticating the one or more mask sets by comparing a generated digital signature with a predetermined digital signature.

Auerbach et al. in US '3316 however discloses wherein the predetermined key comprises one or more mask sets having random or pseudo-random series of bits, the method further comprising the steps of:

Application/Control Number: 10/602,777

Art Unit: 2132

authenticating the one or more mask sets by comparing a generated digital signature with a predetermined digital signature (see column 5, lines 35 – 40: authenticate signature and parts by comparing to corresponding entry list).

It would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a digital signature comprising mask sets as in Blakley, III et al. The motivation for doing so would have been to improve the security of digital data by ensuring its authenticity and integrity.

For claim 18, US '1316 disclose the method of claim 13 but does not expressly disclose using a digital watermarking technique to encode information that identifies ownership, use, or other information about the digital signal, into the digital signal; and wherein said step of validating is dependent on validation of the embedded information.

Auerbach et al. in US '3316 however does disclose using a digital watermarking technique to encode information that identifies ownership, use, or other information about the digital signal, into the digital signal; and

wherein said step of validating is dependent on validation of the embedded information (see column 4, lines 22 – 24: fingerprinting and watermarking of document parts...).

Allen and Auerbach et al. are analogous art because they are from the same problem solving areas (partially controlling access to digital/copyrighted data). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the method of controlling access to digital data as in Allen such that it would incorporate a digital watermarking technique as in Auerbach et al. The motivation for doing so would have been to improve the security and authenticity of digital data.

For claim 19, US '1316 teaches the method of claim 6 and manipulating portions of a digital data but does not expressly disclose:

Blakley, et al. in US '952 however does disclose computing a secure one way hash function of data in the digital signal, wherein the secure one way hash function is insensitive to changes introduced into the digital signal during the step *but does not expressly disclose* a file format.

Auerbach et al. however in US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted).

Allen, Auerbach et al. and Blakley, III et al are analogous art because they are from the same problem solving areas (controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art. Furthermore, it would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and Auerbach et al. such that it would include a secret key comprising mask sets as in Blakley et al. The motivation for doing so would have been to improve the security of digital data by ensuring its authenticity and integrity.

For claim 20, US '1316 teaches:

A method for protecting a digital signal, comprising the steps of:

providing a digital signal comprising (see column 3, line 45: as performed by the digital data processor) {digital data and file format information};

creating a predetermined key (see column 6, lines 61 – 62: encryption key) {comprising a mask set};

manipulating {the file format information} using the predetermined key (see column 2, lines 44 - 48: encrypt portion of data to result in partially-degraded version of data; column 6, lines 60 - 64: encryption key used prior to decryption key; column 7, lines 47 - 55: methods of manipulating portions);

authenticating the predetermined key during playback of the digital data (see column 5, lines 27 – 31: message quality associated with payment; column 6, lines 55 – 59: authentication of encryption and decryption key pair; and

metering the playback of the digital data to monitor content (see column 5, lines 38 – 43: royalty fee payment...) but does not explicitly disclose the digital signal comprising digital data and file format information or expressly disclose a predetermined key comprising mask sets.

Auerbach et al. in US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3 – 5 & 10 - 18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted) *but does not expressly disclose* a predetermined key comprising mask sets.

Blakley, III et al. in US '952 however does disclose a predetermined key comprising mask sets (see column 5, lines 46 – 50: mask associated with a secret key).

Allen, Auerbach et al. and Blakley, III et al are analogous art because they are from the same problem solving areas (controlling access to digital/copyrighted data). At the time of the invention, a skilled artisan would have concurred that the digital data of Allen comprises a data (content) portion and a format (configuration) portion as explicated by Auerbach et al. since this is a well-known and obvious feature in the art. Furthermore, it would be obvious to one of ordinary skill in the art to modify the methods of controlling access to digital data as in Allen and

Auerbach et al. such that it would include a secret key comprising mask sets as in Blakley et al.

The motivation for doing so would have been to improve the security and authenticity of the digital data.

For claim 21, US '1316 teaches:

The method of claim 20, wherein the predetermined key is authenticated to authenticate message information. (see column 5, lines 27 – 31: message quality associated with payment; column 6, lines 55 – 59: authentication of encryption and decryption key pair)

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel Lashley whose telephone number is 571-272-0693. The examiner can normally be reached on Monday - Thursday, alt Fridays btw 7:30 am & 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, Jr. can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laurel Lashley Examiner Art Unit 2132 Application/Control Number: 10/602,777

Art Unit: 2132

26 May 2007

Page 15